

#### ABSTRACT OF THE DISCLOSURE

On a multilayer film which is formed on a semiconductor substrate, an opening which is opened on a base and an emitter is formed in the multilayer film, and after an SiGe/SiGeC film, which has a composition with a higher content of Si in an upper layer region and a lower layer region, and a higher content of Ge in an intermediate layer region, is formed on an entire surface, anisotropic dry etching is performed for the SiGe/SiGeC film up to a predetermined height of the opening.